

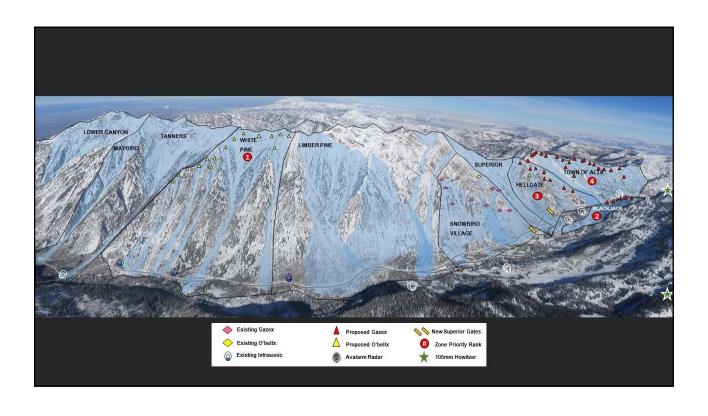
Avaland	che Haz	ard I	nde	x (AHI)
	Very Low	<1		
	Low	1-1	.0	
	Moderate	10-4	40	
	High	40-1	50	
	Very High	>15	50	
Little Cottonwood Canyon	766 (19	986)	1045	(2006)
Red Mountain Pass (CO 550)	335		126 v	v/ infrastructure
Independence Pass (CO 387)	387			
Rogers Pass (Canada)	850		210 v	v/ infrastructure

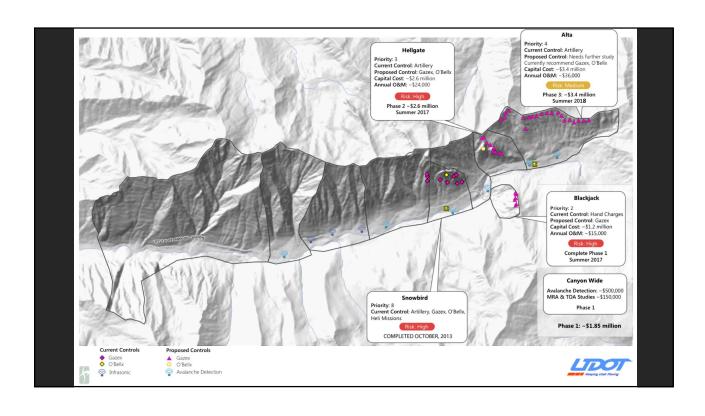
(AHI of 850 prompted Ministry of Transportation to invest in avalanche infrastructure)







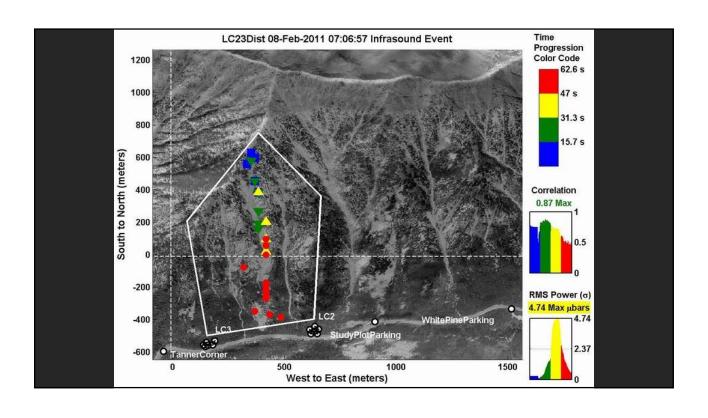


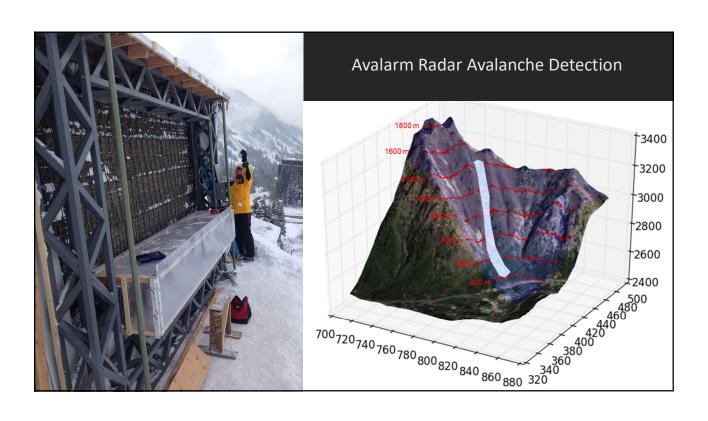




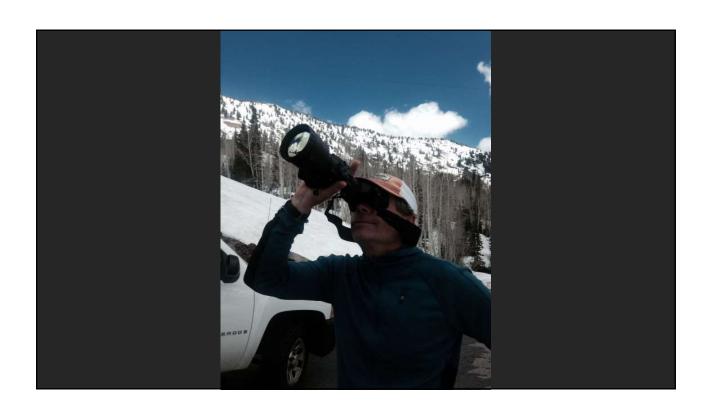


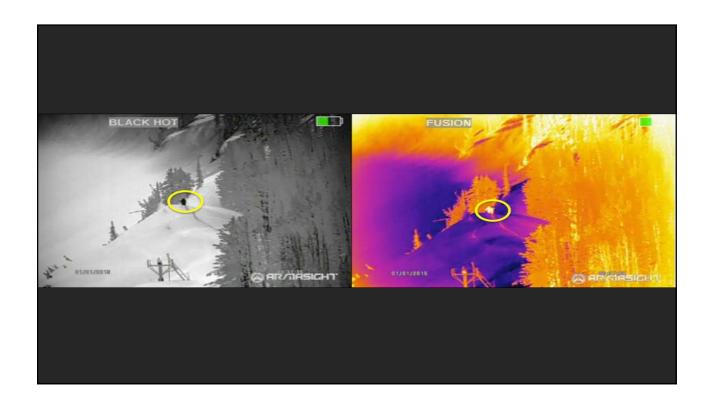






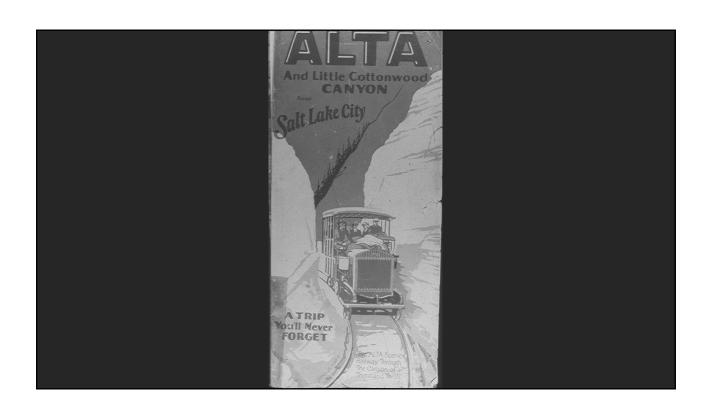














Date: 8/8/2017

To: Cottonwood Heights City Council members

For your immediate consideration:

REF: 8/8/2017 WORK SESSION, AGENDA, Item #2. High-T Intersection.

As a professional architect, with urban planning background, I had taken time to review UDOTs High-T intersection plans, the Environmental Study which states 'Purpose and Need', along with related Traffic studies, and in my professional opinion, the plan as currently presented degrades the quality of safety for users and poses numerous safe passage concerns. These adverse affects are not representational of 'best practices' for operational improvements of the intersection. In support of this project, only the re-alignment portion of the currently skewed intersection seems to favorably remedy ingress/egress issues of Wasatch Blvd and Danish Road. However, the NB (northbound) LCC 'free flow' lane aspect falls short, and does not even meet the expectations of UDOT's own Active Transportation Polices.

I urge council to take pause and reconsider its favorable position on this project, and to revisit safety aspects of the plan with UDOT; and request that UDOTs plans for SR-210 @ Wasatch be evaluated and re-designed to demonstrate that safety considerations herein have been addressed.

The re-configuration of intersectionSR-210 and Wasatch Blvd, as proposed by UDOT, in respect specifically to the High-T 'free flow' northbound lane:

- 1. will adversely degrade safety at the intersection for cyclists; when turning left(northbound) onto Wasatch Blvd, the uninterrupted 'free flow' NB lane will trap cyclists at mid-point of their turn on a median located in the middle of intersection, with only hopes to complete the turn (from stand still position) by scrambling across a stream of cars traveling at speeds upwards of 50mph+ to get to the designated bicycle lane, located on the eastern shoulder of the northbound lane. UDOT had failed to solicit, or it ignored, Bicycle advisory advocate group comments on the design;
- 2. fails to address safe pedestrian passage though the intersection via ped-x signal or crosswalks; immediate areas within this part of the community are growing, and necessitates a need for safe pedestrian passage though this intersection. Other intersections north on Wasatch provide pedestrian cross-walks;
- 3. impacts ingress/egress traffic from 7 to 8 adjoining neighborhood feeder roads, between SR-210 & Wasatch and the S 3500 E signaled intersection to the north. Current traffic patterns at peak times already pose difficulty with ingress/egress flow in these areas. To create a 'free flow' NB lane thru this area only serves to further degrade local traffic patterns. During its Open House, April 12, 2017, UDOT did not address the concern and stated these areas (implying effected intersections) were out of the scope of the project; in other words, UDOT failed to address the adverse effect on local traffic pattern and impact imposed by its 'free flow' NB lane design.

**UDOT has obligation to meet its own policy of Active Transportation,** the design does not consider all users, and imposes risks to cyclists and pedestrian users.

Ref Document: UDOT publication: Inclusion of Active Transportation UDOT 07-117 Effective: May 18, 2006 Revised: December 10. 2013(copy attached)

[Expert]Responsibility: Project Managers

- 5. Evaluate and incorporate the needs of Active Transportation to the extent feasible within the Project's defined budget and purpose for all projects under their control.
- 6. Begin this consideration in the Concept phase to account for any additional costs and continue through Preconstruction and Construction.
- 7. Incorporate low-cost, no-cost, and commonsense improvements that address the needs of Active Transportation in all projects where feasible.

8. Carefully review and document project features that would be detrimental to Active Transportation through the Project Definition Document process prior to incorporation into the Project

That **UDOT worked with Cottonwood Heights City, closely, in this process** presents question as to city council and staff's level of concern for the safety and welfare of its community members, and others who will inevitably pass through this intersection as a car, cyclists, or pedestrian.

I would expect that council and staffs role with UDOT on this project would be one of 'prioritizing its stake in the re-design of this key intersection', particularly in regards to community safety, as this intersections operations has direct impact upon the immediate area. Council has recently approved numerous re-zoning projects adjoining this area, and without question, the effects from those increased densities in respect to traffic, cyclists, and pedestrians will contribute to future traffic issues, as those projects get built out. Under circumstances, it is reasonable to request that UDOT re-consider its design and revise it for optimal and safe usage, prior to construction commencement.

Sometimes the simplest designs are the best approach. Cottonwood Heights has yet to truly test the new smart signal light installation at this intersection, so without data available, it cannot validate whether the need to remove the northbound stop light is warranted or not. Implementing a new smart light system, with a simple "T" configuration and 3-way "smart" signaled light could prove to accommodate traffic flows more effectively and more importantly, safely.

Traffic in/out of LCC has been noted in traffic studies as flat-lined from 2003-2013 (2015 report, according to WFRC and MA), though is still anticipated to increase over time. Expected increases in car traffic, cycling, and pedestrian users render it imperative to design intersections that operate safety for all respective users. Both WFRC and MA agencies address cyclists in traffic studies, and through their prescriptive guidelines, and both recognize the Wasatch & LCC routes as well utilized cycling areas.

Safety First. When a cyclist or pedestrian loses a life at this intersection due to degraded safety with the new intersection traffic light signaling design, responsibility will fall 100% onto UDOT and Cottonwood Heights for: a) their respective negligent roles in disregarding safety: b) choosing to downgrade the quality of safety at the intersection in favor of efficient drive time for NB ski resort traffic passing through our city as its priority. Both respective agencies (UDOT and Cottonwood Heights city) should, without question or hesitation, take into consideration safety risks associated with use of the intersection, including both cyclists and pedestrians. To ignore safety of these users, is to write a death sentence to those very folks who will now be forced to attempt to make passage without assistance from cross walk signaling or full stop light in NB travel direction. Rather than wait for injury/incident to arise from the safety issues with the new intersection design, UDOT should take a pro-active approach to re-evaluate and reconfigure the intersection plan accordingly, before it spends through the \$10mill federally funded project budget. Let's please keep our community safe for all who travel within it or through it.

Thank you.

Kimberly Simons Kraan

3663 E Capstone Ave, Cottonwood Heights, UT 84121

801-944-5516. kskarchtiect@att.net

Docs:

Maps, Existing and Proposed

**UDOT Active Transportation,** 

UDOT Environmental Study, final (with comments).

### **Inclusion of Active Transportation**

**UDOT 07-117** 

Effective: May 18, 2006 Revised: December 10. 2013

### **Purpose**

This Policy defines the Utah Department of Transportation's (Department) position on the inclusion of Active Transportation improvements in the funding, planning, design, operations, and maintenance of transportation facilities. Safety is an important driver within the Department and inclusion of Active Transportation improvements will provide opportunity to consider all users when addressing safety on the transportation system.

### **Policy**

It is the policy of the Department that the needs of bicyclists, pedestrians, and other Active Transportation users will be routinely considered as an important aspect in the funding, planning, design, construction, operation, and maintenance of Department transportation facilities. Active Transportation needs for a project will be documented within the Project Definition Document process.

This policy applies statewide, to facilities in urban, suburban, and rural settings. All transportation activities that are funded by or through Department and planned, designed, constructed, or maintained on state facilities will adhere to this policy. These activities will be referred to as Projects for the purposes of this Policy.

### **Definitions**

Active Transportation: Refers to multimodal transportation solutions that connect people to the places and services they need or desire access to. Includes but not limited to work, school, businesses, government facilities, transit, recreation and community centers, health care, and other services that are essential to their livelihood and wellbeing, using "active" or non-motorized modes such as walking or bicycling. Includes multimodal transportation solutions that are used for recreation.

### **Procedures**

### **Active Transportation**

**UDOT 07-117.1** 

Responsibility: Planning, Program Development and Maintenance

### **Actions**



- 1. Consider the need to incorporate Active Transportation into the State Highway system as the Department develops plans for future work.
- 2. Expand current guidelines for delivering Projects and Programs to facilitate the implementation of this Policy.
- 3. Adjust maintenance budget allocations to allow implementation of this Policy.
- 4. Consider and integrate where appropriate into all planning studies and planning documents developed, accepted and promoted by the Department.

### Responsibility: Project Managers

- 5. Evaluate and incorporate the needs of Active Transportation to the extent feasible within the Project's defined budget and purpose for all projects under their control.
- 6. Begin this consideration in the Concept phase to account for any additional costs and continue through Preconstruction and Construction.
- 7. Incorporate low-cost, no-cost, and commonsense improvements that address the needs of Active Transportation in all projects where feasible.
- 8. Carefully review and document project features that would be detrimental to Active Transportation through the Project Definition Document process prior to incorporation into the Project.

### **Responsibility:** Preconstruction Staff (In-House and Consultants)

9. Evaluate all Projects during design to account for the safety, convenience, and efficiency of Active Transportation.

### Responsibility: Construction Staff (In-House and Consultant)

- 10. Construct all Projects in such a way that Active Transportation users are allowed safe access through the Project where feasible.
- 11. Develop and clearly identity safe, alternative routes for users if this is not feasible.

### Responsibility: Maintenance Staff

12. Maintain all Department facilities to account for the safety, convenience, and efficiency of Active Transportation.

### Responsibility: Operations Staff

13. Operate all Department facilities taking into account the safety, convenience, and efficiency of Active Transportation.

### **ENVIRONMENTAL STUDY**

Project Name: SR-210 @ Wasatch Dr.

PIN: 14431

Project No.: F-0210(25)2

Job/Proj: 54801

Prepared By: Craig Bown

For guidance in preparing this environmental study, refer to Chapter 4 of the UDOT **Environmental Process Manual of Instruction:** 

http://www.udot.utah.gov/go/environmental

### REQUIRED SIGNATURES

I have reviewed the information presented in this Environmental Study and I hereby attest that the document is complete and the details of the document are correct.

Reviewer (Signature): Carissa Watanabe

Date: June 7, 2017

Reviewer (Printed): Carissa Watanabe

Firm/UDOT Region: UDOT Central Environmental

### FEDERAL AID PROJECTS

As a result of this Environmental Study, UDOT has determined that this project will have no significant impacts on the environment and qualifies for preparation as a Documented Categorical Exclusion as approved by UDOT on 04/20/2017. The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by UDOT pursuant to 23 USC 327 and a Memorandum of Understanding dated January 17, 2017, and executed by FHWA and UDOT.

	Craig Bown Date: 2017.06.07 12:41:10	/II
Approved	28×100×1	Date:
	<b>UDOT Region Environmental Manager</b>	
Approved:	But I. Will Digitally signed by Brandon Weston Date: 2017.06.08 10:54:03	Date:
	UDOT Director of Environmental Service	

Justification for the NB intersection traffic signal light removal is based on NB and SB traffic queuing, but they argue their case around traffic queuing "INTO" LCC? Into LCC is the SB direction.

### 1. Purpose and Need for Action

SR-210 is one of two arterials providing access and egress for Little Cottonwood Canyon. Due to high concentrations of departures associated with the ski resort's operational hours during winter months, the signalized intersection of SR-210 and Wasatch Boulevard has been observed to cause continuous queuing into Little Cottonwood Canyon. This queuing can become a safety hazard, limiting snow plow operations and roadway closures associated with avalanche control. Additionally, the current skewed configuration of SR-210 and Wasatch Boulevard does not meet intersection guidelines. UDOT Traffic and Safety has reviewed this intersection and recommends operational improvements be implemented. The purpose of the project is to optimize mobility and improve operations of the intersection.

### 2. Description

UDOT is proposing to reconfigure the existing skewed intersection of SR-210 and Wasatch Boulevard and install a signalized High-T. The High-T configuration will allow the NB SR-210 movement exiting Little Cottonwood Canyon to become free flowing. The project is located along SR-210 from approximate MP 1.9 to MP 2.6; along the SB leg of Wasatch Boulevard for approximately 0.20 miles; and on 8890 South for approximately 0.08 miles. The overall project length is approximately 1 mile (see exhibits in appendix). The project will include: placement of new pavement to accommodate the reconfigured lane design; installation of new traffic signals (i.e. foundations, poles, and mast arms and equipment systems), traffic detection, cameras, and Advanced Traffic Management System (ATMS) equipment; and drainage design modifications. The project would also include: installation of raised medians, traffic barrier, new pavement markings, signage, and delineators. This project will be completed within the existing Right-of-Way of UDOT and Cottonwood Heights City.

### 3. Public Hearing/Opportunity for Public Hearing

- YES This project could result in public controversy or substantial impacts to adjacent properties, or substantially changes roadway geometry.
- There are significant social, economic, environmental or other effects. If YES, a Categorical Exclusion is not applicable. Consult with UDOT Central Environmental Services. Degrades safety of cyclists who use the intersection and fails to even address pedestrian usage/ safe passage.
- NO UDOT/FHWA has determined that a public hearing is in the public interest.

If the answer to ANY of the above questions is YES, a public hearing or opportunity for a public hearing is required (attach documentation identifying date and location of hearing, summary of comments, and responses to substantial comments, or include certification of opportunity for hearing.)

The following types of public involvement have been provided:

- YES Public Hearing in accordance with state and federal procedures
- NO Opportunity for Public Hearing
- YES Open House poor excuse to 'showcase' project without consideration given to public input at time.
- YES Other: Prior to the Open House, individual meetings were held with residences effected by the intersection design change.

Exactly how many & where is this public commentary documented? Q & A's?

- YES Documentation is attached identifying the date and location of hearing, summary of comments, and responses to substantial comments; or the Certification of Opportunity for a Hearing is attached.
- Comments: A public open house was held on April 12, 2017 at Canyon View Elementary (3050 Bengal Blvd. Cottonwood Heights, UT 84121) between 4:30 pm to 7:00 pm in accordance with Utah Administrative Code Rule R930-2. Comments were accepted both verbally and written. A summary of comment received can be seen in the Appendix.

### 4. Right-of-Way

- NO Acquisition of Right-of-Way is required.
- N/A The right-of-way required is significant because of its size, location, use, or relationship to remaining property and abutting properties. (If the right-of-way required is significant, the project does not qualify as a Categorical Exclusion.)

### 6. Paleontological

This project is one of the 16 types of projects listed in Stipulation III of the Memorandum of Understanding (MOU) with the Utah Geological Survey (UGS) that has no effect on paleontological resources and does not require notification to the UGS. If YES, a memo from the UDOT Region NEPA/NHPA Specialist is attached (can be included in cultural memo).

For all other projects, the UGS has been notified and has responded with the following (attach UGS letter and memo from the UDOT Region NEPA/NHPA Specialist):

- N/A There are no known paleontological localities in the area of potential effects and the formations in the project area have a low potential for containing fossil remains (Class 1 or 2).
- N/A Fossil-bearing formations (Class 3-5) and/or known paleontological localities are present in the area of potential effects, but the UDOT Region NEPA/NHPA Specialist (or paleontologist) has determined that they will not be affected by the project.
- N/A Fossil-bearing formations (Class 3-5) and/or known paleontological localities are present in the area of potential effects and may be affected by construction activities. A survey and/or monitoring by a qualified paleontologist is required.

### 7. Threatened, Endangered, or Candidate Species

### For Federally or State Funded Projects:

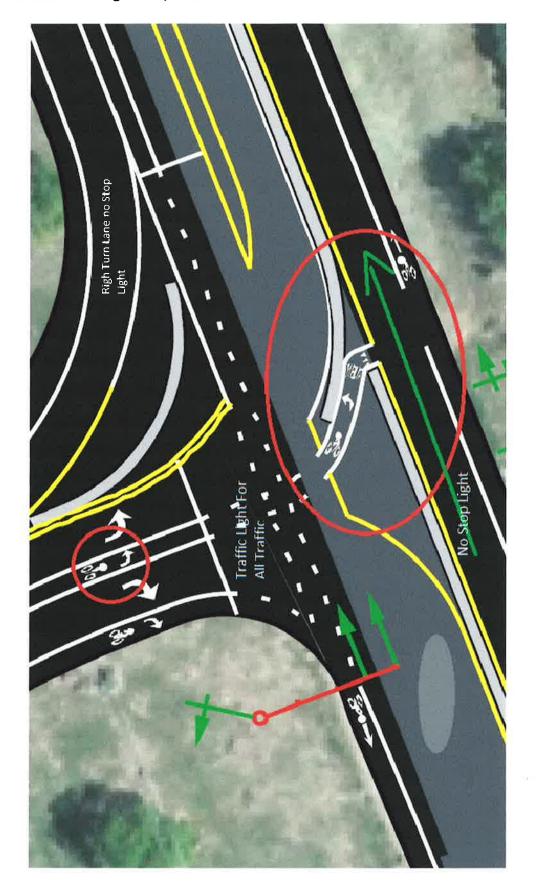
- YES Project will have "no effect" to T&E species, or their critical habitats, protected under the Endangered Species Act. If YES, attach "no effect" memo or review/comments (in the case of local government projects) from UDOT's Wildlife Biologist.
- NO Project "may affect, but is not likely to adversely affect" T&E species, or their critical habitats, protected under the Endangered Species Act. If YES, attach BA and "concurrence" from the U.S. Fish and Wildlife Services (USFWS). List all mitigation/conservation measures.
- Project "may affect, and is likely to adversely affect" threatened and endangered species, or their critical habitats, protected under the Endangered Species Act. If YES, attach BA and USFWS BO. List all mitigation/conservation measures.
- NO The USFWS has issued a "jeopardy" opinion regarding this project. If YES, attach BA and BO as above. This project cannot go forward without being reconsidered.

In downgrading the safety of the intersection this project endangers both cyclists and pedestrian species.

### **Existing Intersection Configuration, LCC & Wasatch:**



Proposed High - T Intersection Configuration, LCC & Wasatch:



### Feeder Roads impacted by Free Flow Lane(NB) Wasatch:



S 3500 E & Wasatch intersection, ped-x-ing:



### Bengal/Honeywood Cove & Wasatch intersection, ped-x-ing:



### Fort Union(BCC) & Wasatch intersection, ped-x-ing:



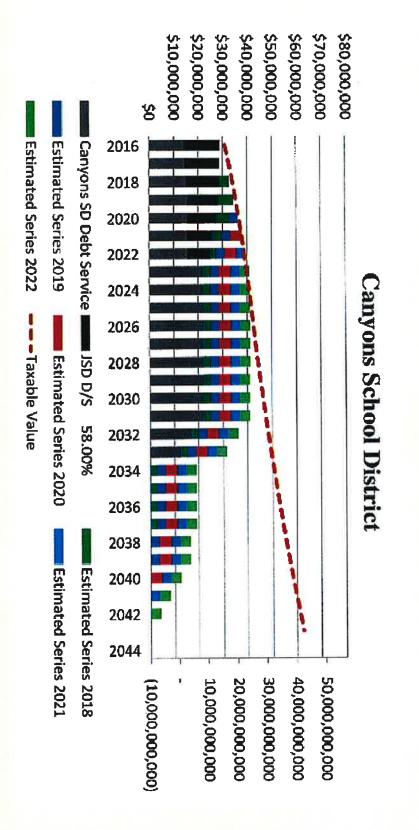
6200 S & Wasatch intersection, ped-x-ing:



# Possible Projects Pick List for Board Using all Financing Sources (Bond, Cap Fund Balance, On-going Capital)

Project	Year Opened	Total
Alta High Remodel	1978	
CCHS Wings	2013	
West Draper Elementary	,	
White City Elementary	1958(Edgemont)	non
Midvalley	1957	
Peruvian Park	1964	
Union Middle	1968	
Hillcrest High	1962	
Brighton High	1969	
Six Elementary Offices Upgrades		
18 Elementary Lighting Upgrades		
Total Expenses		
OTHER PROJECTS		

# Financial Impact Objective to Layer on Debt



## Timeline Option #1 High Schools First

### Summer 2018

Alta Approx two years to complete
Corner Canyon 10 months to complete
Brighton approx three years, complete by fall 2021
Hillcrest approx three years, complete by fall 2021
Elementary lighting and offices (50% of schools)

## Summer 2019

Elementary lighting and offices (50% of schools)
Elementary School A - 15 months open fall 2020

## Summer 2020

Elementary School B - 15 months open fall 2021

## Summer 2021

Elementary School C - 15 months open fall 2022

Union Middle- Approx two years to complete open fall 2023

## Summer 2022

Elementary School D - 15 months open fall 2023

## Middle and Elementary Schools First Timeline Option #2

## Summer 2018

10 months to complete Approx two years to complete

Corner Canyon

Elementary lighting and offices (50% of schools)

Elementary School A - 15 months open fall 2019

Elementary School B - 15 months open fall 2019

Elementary School C - 15 months open fall 2019

Union Middle- Approx two years to complete open fall 2020

## Summer 2019

Elementary lighting and office (50% of schools)

## **Summer 2020**

Brighton Hillcrest

approx three years, complete by summer 2023

approx three years, complete by summer 2023

## Summer 2021

Elementary School D - 15 months open fall 2022

**Possible Projects** 6100 S 6280 S 04 111 SW EB FWY 6400 S 1215E WB FWY 1460 W N 6400 S WY 6600 S CHESTER ST ш 6710 S 6850 8 8 6720 S FORT UNION BLVD 8 7000 S Ridgecrest ES 23 8882 Brighton HS East Midvale ES TEMPLE DR Hillcrest HSe 7615 S Midvalley ES 87660 S 670 S ALK SIESTA 7635 S 7800 S ≥7900 S CREEK RO Canyon View ES® BENGAL BLVD 7800 S 8000 S East Sandy ES
Peruvian Park ES 5 WASATCH ST \*8050 S 8200 Oakdale ES CREEK PD 8380 S PIONEER AVE W 8600 S 8600 S m 8800 S 8685 S FRUN Brookwood ES CYS RD WATERSLY 8760 S TERS (2 Silver Mesa ES 8925 S 9000 S 9085 S 9000 9270 S 628 **Quail Hollow ES** PLATA WAY FALCON WAY 9400 S CITTLE COTTONIA 9400 S 9400 S 92 9560 S 9400 Ѕш 9670 S View ESe SHIELDS Granite ES **Edgemont ES** OCARNATION ●00000 S • Eastmont MS w Park Lane ES SOUTH JORDAN PKY SEGO LILY DR TO шш RING 10600 6 10600 S S OMPLE O 10550 S PEO MRY OOD OR ш 11000 Altara ES 10980 S Crescent ES Alta HS Sunrise ES 11400 S 700 W NATES Lone Peak ES MBALLS LN 2 Sprucew 12000 S 12100 S 12200 S KIMBALLS LN New ES 12600 5 12650 S DR 150 2800 S 12800 S ≥ Corner Canyon HS ≥ 13200 S CARLQUIST DR 13200 S CORNER m Willow Springs ES OVERS 13490 S ਭ 13800 S CANTON 14000 S OUTHFORK D CPPES CAN Legend MIKE WEIR DR Oak Hollow ES TRY RD Bond\_Schools TRAVERSE PUDG Bond\_Schools2 MALANDMOR OF District SKEP MOUNTA streets\_large DR Jordan\_River NOTIE DR Printed: 05 July 2017

